ABSTRACT OF THE DISCLOSURE

A blade-like connecting needle for measuring a semiconductor wafer has an increased capability for measuring a small current and also has stable characteristics. The blade-like connecting needle 1 includes a blade signal 10 line for transmitting signal from the semiconductor wafer, a support insulator 8 covering at least a portion of the blade signal line 10, a plurality of blade guard patterns 12a, 12b, 12c, 12d disposed in or on the support insulator 8 for electromagnetically shielding the blade signal line 10, and a probe 2 supported on the support insulator 8 and connected to the blade signal line 10. There are also disclosed processes of producing the blade-like connecting needle 1. A method for manufacturing a coaxial or hollow blade-like connecting needle is also provided.